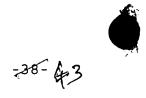


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What is Claimed is:

- 1. A parenteral adjuvant composition comprising a detoxified mutant of a bacterial ADP-ribosylating toxin as the parenteral adjuvant and at least one selected antigen.
- A composition according to claim 1 wherein the non-toxic adjuvant is a detoxified mutant selected
 from the group consisting of cholera toxin (CT), pertussis toxin (PT), and an E. coli heat-labile toxin (LT).
- 3. A composition according to claim 2 wherein the detoxified mutant comprises one or more amino acid additions, deletions or substitutions in the A subunit of the bacterial holotoxin.
- 4. A composition according to claim 3 wherein the detoxified mutant is selected from the group consisting of LT-K63, LT-R72, CT-S109, and PT-K9/G129.
 - 5. A composition according to claim 4 wherein the detoxified mutant is LT-K63.
 - 6. A composition according to claim 4 wherein the detoxified mutant is LT-R72.
- 7. A parenteral adjuvant composition
 30 comprising a detoxified mutant of a bacterial ADPribosylating toxin as the parenteral adjuvant and a
 pharmaceutically acceptable topical vehicle.
- 8. A composition according to claim 7 wherein the non-toxic adjuvant is a detoxified mutant selected

from the group consisting of cholera toxin (CT), pertussis toxin (PT), and an $E.\ coli$ heat-labile toxin (LT).

- 9. A composition according to claim 8 wherein the detoxified mutant comprises one or more amino acid additions, deletions or substitutions in the A subunit of the bacterial holotoxin.
- 10. A composition according to claim 9 wherein the detoxified mutant is selected from the group consisting of LT-K63, LT-R72, CT-S109, and PT-K9/G129.
- 11. A composition according to claim 10 wherein the detoxified mutant is LT-K63.
 - 12. A composition according to claim 10 wherein the detoxified mutant is LT-R72.
- 20 13. The composition of claim 7, further comprising at least one selected antigen.
- 14. A parenteral adjuvant composition comprising a detoxified mutant of a bacterial ADP25 ribosylating toxin as the parenteral adjuvant, a pharmaceutically acceptable topical vehicle and at least one selected antigen.
- 15. A method for making a parenteral adjuvant composition comprising combining a detoxified mutant of a bacterial ADP-ribosylating toxin as the parenteral adjuvant with at least one selected antigen.
- 16. A method according to claim 15, further35 comprising combining a pharmaceutically acceptable

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topical vehicle with the parenteral adjuvant and the antigen.

- 17. A method of making a parenteral adjuvant composition comprising combining a detoxified mutant of a bacterial ADP-ribosylating toxin as the parenteral adjuvant with a pharmaceutically acceptable topical vehicle.
- 18. A method according to claim 17, further comprising combining at least one selected antigen with the detoxified mutant of a bacterial ADP-ribosylating toxin and the pharmaceutically acceptable topical vehicle.

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- 19. A method for immunizing a vertebrate subject comprising parenterally administering to the vertebrate subject an immunologically effective amount of
- a) an adjuvant comprising a detoxified mutant of a bacterial ADP-ribosylating toxin in combination with a pharmaceutically acceptable vehicle; and
 - b) at least one selected antigen.
- 20. A method according to claim 19 wherein the non-toxic adjuvant is a detoxified mutant selected from the group consisting of cholera toxin (CT), pertussis toxin (PT), and an E. coli heat-labile toxin (LT).
 - 21. A method according to claim 20 wherein the detoxified mutant comprises one or more amino acid additions, deletions or substitutions in the A subunit of the bacterial holotoxin.

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vehicle.

transcutaneously.

- A method according to claim 21 wherein the detoxified mutant is selected from the group consisting of LT-K63, LT-R72, CT-S109, and PT-K9/G129.
- A method according to claim 22 wherein the detoxified mutant is LT K63.
 - A method according to claim 22 wherein the detoxified mutant is LT-R72.
 - A method according to claim 19, wherein the adjuvant and antigen are administered subcutaneously, transcutaneously or intramuscularly.

26. A method according to claim 19, wherein the pharmaceutically acceptable vehicle is a topical

27. A method according to claim 26, wherein the adjuvant and antigen are administered

28. A method according to claim 19, wherein the adjuvant is administered to the vertebrate subject prior to administering the selected antigen.

29. A' method according to claim 19, wherein the adjuvant is administered to the vertebrate subject subsequent to administering the selected antigen.

30. A method according to claim 19, wherein the antigen is administered to the vertebrate subject concurrent with administering the selected antigen.

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